



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/553,776

10/20/2005

Urs Lehmann

EL/2-22887/A/PCT

7721

324 7590 09/22/2008

JoAnn Villamizar
Ciba Corporation/Patent Department
540 White Plains Road
P.O. Box 2005
Tarrytown, NY 10591

EXAMINER

NAZARIO GONZALEZ, PORFIRIO

ART UNIT

PAPER NUMBER

1621

MAIL DATE

DELIVERY MODE

09/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/553,776	Applicant(s) LEHMANN ET AL.	
	Examiner PORFIRIO NAZARIO GONZALEZ	Art Unit 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-21 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/13/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-8 and 10-21 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for compounds of the formula (1) where D¹ and D² are an unsubstituted or substituted carbocyclic ring, and R² and R³ are cyano, does not reasonably provide enablement for compounds of the formula (1) where D¹ and D² are an unsubstituted or substituted heterocyclic ring, and/or R² and R³ are both together a heterocyclic ring. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. For a rejection under 35 U.S.C. § 112, first paragraph the following factors must be considered. *In re Wands*, 8 USPQ2d 1400, 1404 (CAFC, 1988): (1) Breadth of the claims, (2) Nature of the invention, (3) State of the prior art, (4) Level of ordinary skill in the art, (5) Level of predictability in the art, (6) Amount of direction and guidance provided by the inventor, (7) Existence of working examples, and (8) Quantity of experimentation needed to make or use the invention based on the content of the disclosure.

Art Unit: 1621

4. The breadth of the claims involves metal complexes having Schiff base type ligand of the formula (1) that are useful in optical recording medium, printing ink or color filter.

The nature of the invention is in the field of organometallic chemistry.

5. The state of the art shows the preparation of Schiff base ligands having cyano groups and metal complexes containing said ligands. See references cited in the international Search Report (PCT/EP2004/050706). The level of ordinary skill in the arts is high and limited to the preparation of metal complexes having Schiff base type ligands.

6. The predictability or lack thereof in the art refers to the ability of one skilled in the art to extrapolate the disclosed or known results to the claimed invention. The lower the predictability, the higher the direction and guidance that must be provided by applicant.

In the instant invention the predictability is very low and consequently, the need for higher levels of direction and guidance by applicant. However, the amount of direction and guidance provided by applicant is limited to the preparation of a Nickel (II) Schiff base metal complex of the formula (1) according to claim 1 where D^1 and D^2 are an unsubstituted or substituted carbocyclic ring, and R^2 and R^3 are cyano. See Example 1. No other working examples or guidance in the instant specification is provided for the preparation of Schiff base metal complex of the formula (1) according to claim 1 D^1 and D^2 are an unsubstituted or substituted heterocyclic ring, and/or R^2 and R^3 are both together a heterocyclic ring. Therefore, the attempt to extrapolate the preparation scheme in Example 1 to the multitude of compounds having one or more heterocyclic rings as part of the Schiff base ligand is not proper.

Art Unit: 1621

7. Therefore, the quantity of experimentation required to make the compounds as claimed, based on applicant's limited disclosure would be undue burden because one of ordinary skill in the art would have to perform a significant amount of experimentation to ascertain how to make the compounds of formula (1), as recited in claim 1 when D¹ and D² are an unsubstituted or substituted heterocyclic ring, and/or R² and R³ are both together a heterocyclic ring.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The compound A-25, in claim 5, has been excluded in the proviso of claim 1. Since claim 5 ultimately depends on claim 1, therefore compound A-25 cannot be claimed.

10. Claims 7 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are missing the end period (.). Please correct.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

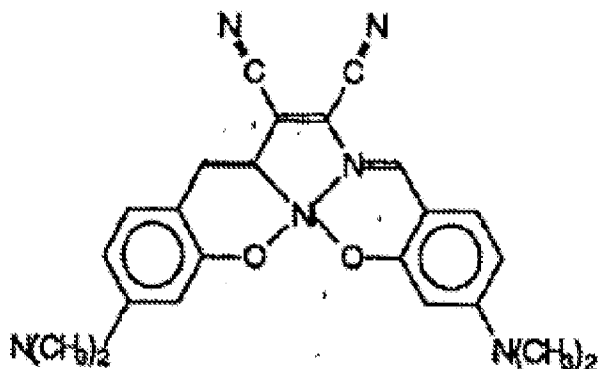
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1621

12. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lacroix et al., Chemistry of Materials, Vol. 8, pp. 541-545 (1996), cited by Applicants.

The Lacroix et al. reference discloses the compound having the formula

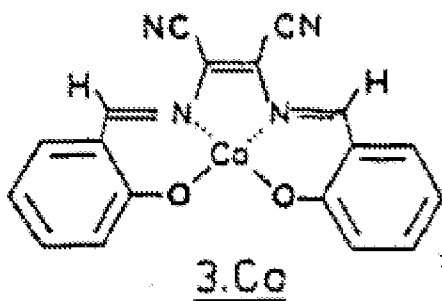


NiL

at page 154. This is the

compound A-19 of claim 5.

13. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wöhrle et al., Polymer Bulletin, Vol. 13, pp. 57-64 (1985), cited by Applicants. The Lacroix et al. reference discloses the compound having the formula



3.Co

, see Scheme 2 on page 58. This compound

reads on claim 1 when Me is cobalt, D¹ and D² are an unsubstituted carbocyclic ring, R² and R³ are cyano, and R¹ = R⁴ = H.

Art Unit: 1621

14. Claims 1-4, 13 and 15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Iwamoto et al., Chemistry Letters, pp. 343-346 (1976), cited by Applicants. The Iwamoto et al. reference discloses the compound having the formula

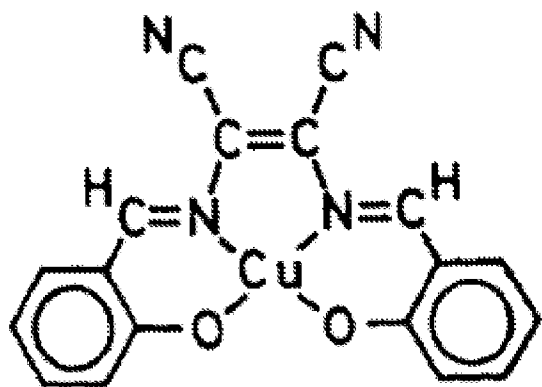
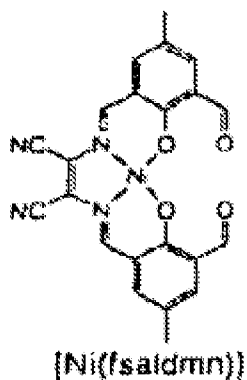


Fig. 2

at page 345. This compound reads on claim 1 when Me is copper, D¹ and D² are an unsubstituted carbocyclic ring, R² and R³ are cyano, and R¹ = R⁴ = H.

15. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Handa et al., MOL. CRYST. LIQ. CRYST., Vol. 342, pp. 75-80 (2000), cited by Applicants. The Handa et al. reference discloses the compound having the formula

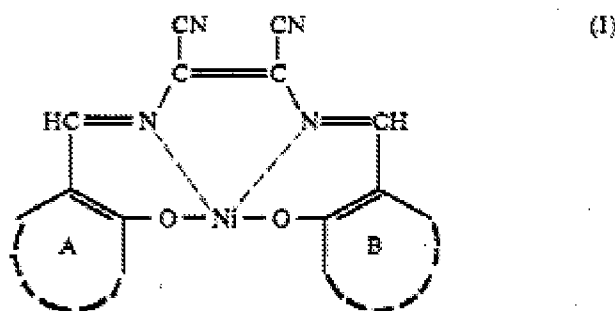


at page 76. This compound reads on claim 1 when Me is Ni, D¹

Art Unit: 1621

and D^2 are a substituted carbocyclic ring, R^2 and R^3 are cyano, $R^1 = R^4 = H$, and $R^5 = R^6 = -CH_3$, $-C(O)H$.

16. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent No. 4,265,632. The '632 U.S. patent discloses the compound having a



general formula (1)

wherein A and B

are defined in the Examples.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PORFIRIO NAZARIO GONZALEZ whose telephone number is (571)272-0641. The examiner can normally be reached on Mon.-Fri. (9:30 AM - 6:00 PM).

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel M. Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 1621

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Porfirio Nazario-Gonzalez/
Primary Examiner, Art Unit 1621

PNG
September 11, 2008